

Oceanic and Atmospheric Processes

SO414 (3-2-4) Fall 2002

Policy and Information

Instructor: Assist. Prof. Todd D. Sikora

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Text: Optional: Introduction to Physical Oceanography (2nd ed.), by J. Knauss, Prentice-Hall
Optional: Introductory Dynamic Oceanography (2nd ed.), by S. Pond and G. L. Pickard, Pergamon Press
Optional: An Introduction to Dynamic Meteorology (3rd ed.), by J. R. Holton, Academic Press Inc.

Objectives: **To develop an understanding** of the forces which govern the motions in the two environmental fluids that affect naval operations: the ocean and the atmosphere. In doing so, we will employ:

- a. mathematical relationships
- b. conceptual models
- c. the integration of theoretical and practical aspects of the physics of the ocean and the atmosphere.

Specific objectives will be provided for each lecture topic.

POLICY STATEMENT

1. Grade Weights:

	<u>6wk</u>	<u>12wk</u>	<u>16 wk</u>	<u>Final Grade</u>
Quizzes	1/3	1/3	1/3	2.5/10
Homework	1/3	1/3	1/3	2.5/10
Labs	1/3	1/3	1/3	2.5/10
Final Exam	--	--	--	2.5/10

Grades will be assigned as follows:

- A: 90%-100%
- B: 80%-89%
- C: 70%-79%
- D: 60%-69%
- F: 59% and below

Note that I reserve the right to adjust the grading system if I deem it necessary.

2. Deliverables

a. Exam:

A comprehensive final exam will be given at the end of the course. If you are unable to attend an exam, you must make prior arrangements with me.

b. Homework:

Homework problems will be assigned approximately every two weeks. Master copies of the homework assignments will be collected at the beginning of class on the dates they are due (due dates listed as homework review days on the syllabus). I will grade the master copies. Students should photocopy their homework assignments before submitting them for grading. Those photocopies will be used for subsequent homework review sessions that will be held during class on the due dates. **Late homework assignments will receive zero credit.**

b. Quizzes:

Quizzes will be given approximately every two weeks. Quiz dates are listed on the syllabus. Each quiz will be based on the homework assignment that was reviewed the previous week. A quiz missed due to an excused absence will receive a grade of zero if not made up within two class meeting days. It is the student's responsibility to schedule a make-up. A quiz missed due to an unexcused absence will receive a grade of zero.

c. Labs:

Laboratory sessions will occur approximately every one to two weeks and are listed on the syllabus. You are responsible for having your corresponding laboratory reports completed by the beginning of class on the announced due dates. Laboratory reports will be collected. Laboratory reports will be graded for content and presentation. **Late laboratory assignments will receive zero credit.**

d. Capstone:

COB 20 September: advisor chosen and Contract signed

COB 1 November: Capstone proposal (summary, outline, references)

Instruction OCEANDEPTINST 1530.1A and contract available in Dept. Webpage under Oceanography Instructions.

3. General Information:

- a. Reading assignments are listed in the course syllabus. I encourage each student to complete the readings prior to class to maximize the understanding of the lecture material. If you buy a text, bring it to class.
- b. In addition to the reading assignments from the text, I will be providing my lecture notes to each student. I plan to post these notes on-line.
- c. Each Student will be assigned to a study group for the purpose completing homework and laboratory assignments. These study groups will be formal. As such, each study group will be tasked with developing a working Charter. In addition, I will use peer evaluations of study group members as a factor when determining final grades.
- d. Classroom Policy:
Assigned Section Leaders will become thoroughly familiar with COMDTMIDNINST 1080.1 series. Section Leaders will be responsible for calling the section to attention, calling seats, and dismissing the class. If a student is not present when the class is called to attention, an absence or tardy, which ever is appropriate, will be reported to me by the Section Leader.

We will follow proper military etiquette and courtesy at all times. I expect the same standards of appearance and conduct that your company officer expects of you.

I STRONGLY encourage classroom discussion of the lecture material.

DO NOT COMPROMISE ANY ASPECT OF YOUR HONOR CONCEPT.

- e. Office Hours:
I have an open door policy.
- f. Cell Phones:
Cell phone use is not permitted for any reason inside the classroom. If your cell phone rings inside the classroom, or if you use your cell phone inside the classroom, you will immediately be asked to leave the class and report the incident to your company officer.
- g. Calculators:
For quizzes and exams, calculators may only be used to perform basic calculations. Those calculations are addition, subtraction, multiplication, division, exponential

functions, logarithms, and trigonometric functions. Thus, you are not permitted to use calculators for solving vector calculus problems (e.g., dot products or cross products) on quizzes and exams. Thus, you are not permitted to use calculators to solve second or higher order differential equations on quizzes and exams. Thus, you are not permitted to use calculators to perform any derivations on quizzes and exams. Thus, you are not permitted to use calculators as electronic equation sheets or reference notes on quizzes and exams. If in doubt, ask me.

h. Equation sheets:

You will be provided with an equation sheet during each quiz and exam, unless otherwise notified in advance by the instructor. You are not permitted to use equation sheets handed out during prior quizzes and exams for use during current quizzes and exams. With the exception of a writing utensil and a calculator, the equation sheet is the only outside resource you are permitted to use during quizzes and exams.